Title: Evaluating the surrounding world, one's own personality and one's own future by the youth and the emotions shown by them

Author: Teresa Borowska

Citation style: Borowska Teresa. (2009). Evaluating the surrounding world, one's own personality and one's own future by the youth and the emotions shown by them. "The New Educational Review" (Vol. 17, no. 1 (2009) s. 367-382).

Teresa Borowska
Poland

The New Educational Review

Evaluating the Surrounding World, One's Own Personality and One's Own Future by the Youth and the Emotions Shown by Them

Abstract

The basic thesis I intend to prove here is as follows: there is a close connection between emotional resources of young people and the cognitive style presented by them.

To justify the above thesis, some empirical research had to be done, whose aim was to show the educational provision of the youth with emotional resources and the cognitive style. The researches were carried out not only in Poland, but Norway as well. The participants were students of junior high schools, high schools and universities. They also included working people, computer players, and the disabled (paraplegics). It is worth mentioning that the cognitive element of emotions appears in a great number of conceptions.

Key words: *cognitive style, personality, emotions*

Introduction

The conscious emotional representation may, according to J. Reykowski (1974), arise at one of two levels: a lower lever, allowing for a ready-made expressional procedure, and a higher level, allowing for expressing the presented fact or process in symbolical forms.

Arising representation of emotions at the coding level can be found in the conception by K. Obuchowski (1982). According to the author of "The Codes of Orientation and the Structure of Emotional Processes", the sources of emotions are

messages received by an individual, which can be considered taking their objective and emotional value into account. The objective value is the scale of how much the news included in the message suit the individual's needs. The emotional reaction associating the message reception is representation of the needs. K. Obuchowski thinks that cognition is a higher and organized form of orientation, and the lowest code of orientation is the code in which no information about the outer world has any importance for the individual's behaviour. K. Obuchowski calls this a homeostatic code. Outer information is processed by the whole system, and finds its representation in a shift of homeostasis process. As a result of such an approach, it can be stated, following K. Obuchowski, that homeostatic coding is the primary source of emotion.

The current cognitive approach can be found in conceptions of G.L. Clore (1992), and also N. H. Frijd (1993), R. Lazarus (1993) and K. Scherer (1993).

G. l. Clore (1994) thinks that since emotions are states of mind, then there is some cognitive process in them. In his opinion, appearance of a situation perceived as a negative or positive from an individual's point of view is a necessary condition for emotions to appear. According to G L. Clore, cognitive evaluation does not need to have a conscious character. Though information processing which causes an emotion unconscious, the importance of informational and motivating results of emotions depends on their conscious experiencing, as well as conscious focusing of an individual.

According to N. H. Frijd (1993), some elementary level of cognitive engagement is necessary if emotional experience is supposed to go beyond a simple affection.

R. Lazarus (1993) states that a stimulus arouses emotions only on condition of analyzing its meaning, similarly to K. Schrerer (1993) who says that arousing emotions requires some cognitive processes.

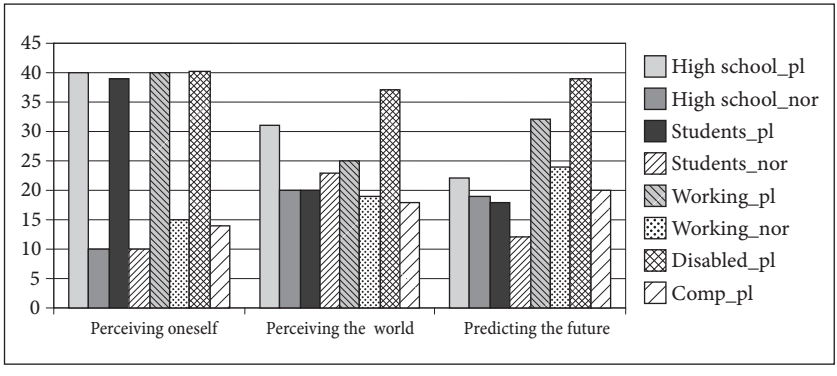
Not all conceptions of emotions take into consideration their cognitive concept. Some of them prefer an unconscious affection assuming that emotional processes may take place outside an individual's consciousness. Its example is R. Zajonc's theory showing that an emotion takes first place before a thought and may be independent of it. R. Zajonc states that unconscious cognition differs from unconscious affection in the fact that the first one must always have some objective reference (content), while unconscious affection may freely "flow" from one stimulus to another (LeDoux 2000, pp. 61–71).

R. Bornstein (1992)also attempted to prove unconscious emotion processing. Eventually, J. Bargh's experiments (1992)showed that we can activate emotions under the threshold of our consciousness, however these unconscious processes may influence our way of thinking and acting in social situations.

According to R. Davidson and P. Ekman (1998, p.254), the growing number of data proves that an emotion aroused beyond an individual's consciousness is characterized by different features from those of an emotion aroused by conscious factors.

Paying a lot of attention, in the mentioned research, to a cognitive component of emotions, it was attempted to find out how the respondents in both countries perceive themselves, their future and the surrounding world. All these three components are studied, in the mentioned results, by M. Blackburn and H. Wilkinson's Questionnaire of Cognitive Style. The authors of the questionnaire started from the depressive cognitive triad, therefore the first component is a collection of negative/positive evaluations, convictions and opinions concerning an individual. The second component of the cognitive triad is a tendency to interpret current experiences in a negative/positive way. The respondents perceive the surrounding world as the one demanding too much from them, which they are not able to fulfill. The third component includes negative/positive evaluations and predictions about the future. Images of future events are full of convictions of difficulties and hardships, which

Figure 1. The cognitive style in the studied groups



will always be present. Being convinced of future failures and defeats and negative emotions accompanying them makes an individual lose their will to act. They are motivating factor, causing the conviction and feeling of hopelessness.

M. Blackburn and H. Wilkinson's questionnaire includes a series of short descriptions of situations which may happen in everyday life. Each situation is followed by alternative ways of thinking and feeling in such a situation. A given respondent is asked to imagine that these situations actually happened to them and to choose a thought which is the closest to their way of thinking (Stach, Zięba

1992). The questionnaire contains 30 situations, each of which has four possible scores from 1 to 4. The maximum score – 120 – means the worst result. The best score is 30 points for the whole questionnaire.

Let us look at the results obtained by Polish and Norwegian groups after doing the whole questionnaire. The issue is illustrated in Figure 1 and the following tables.

The Poles

The average point value scored by the respondents in the Polish groups calculated for one person and the average point value for the styles and their standard deviations are presented in Table 1.

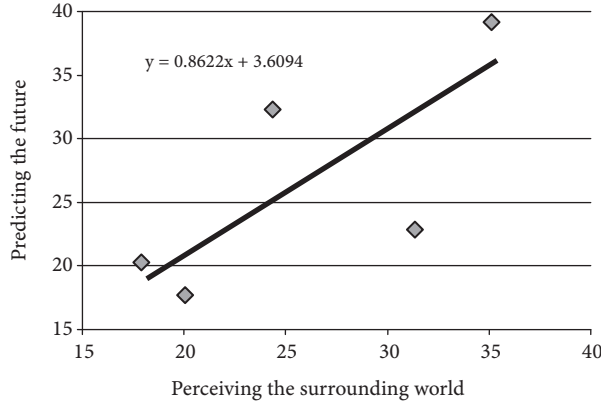
Table 1 The average point value for different elements of the cognitive style and their standard deviations in the Polish groups.

Points/ Person	High school pl	Students pl	Working people pl	Disabled pl	Computer players pl	Average	Standard deviation
Perceiving oneself	40	39	40	40	14	34.6	11.5
Perceving the surrounding world	31	20	25	37	18	26.2	7.9
Predicting the future	22	18	32	39	20	26.2	9
Total	93	77	97	116	52	87	24

As shown above, the lowest score for perceiving oneself was obtained by the computer players. The players' score is almost three times lower than the one obtained in other groups. They also obtained the lowest score for perceiving the surrounding world, but the difference from other groups is lower than before and almost places itself within the range of changes defined by the standard deviation. The students' score is quite low, as well. The highest score, twice as big as the one obtained by the computer players and students, was obtained by the disabled. All in all, the highest score was obtained by the disabled while the lowest by the computer players. The difference in the score with reference to the average value in these groups exceeds the value of the standard deviation. A clear connection

between perceiving the surrounding world and predicting the future can be seen here, which is shown in Figure 2. The groups which obtained the highest score for perceiving the world also had a high score for predicting the future. No connection with perceiving oneself was noticed.

Fig. 2 The connection between different elements of the cognitive style in the Polish groups



The Norwegians

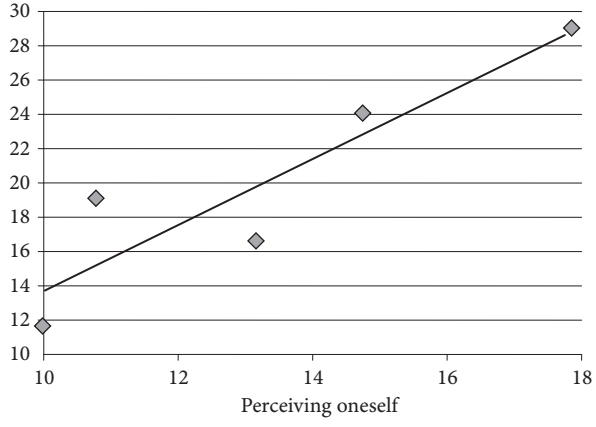
The average point value obtained by the respondents in the Norwegian groups calculated for one person and the average point value for the styles and their standard deviations are presented in Table 2.

Table 2 The average point value for different elements of the cognitive style and their standard deviations in the Norwegian groups

Points/Person	High schools Nor	Students Nor	Working people Nor	Average	Standard deviation
Perceiving oneself	10	10	15	13.4	3.2
Perceiving the surrounding world	20	23	19	21.0	2.9
Predicting the future	19	12	24	20.2	6.5
Total	50	45	58	54.6	10.9

As seen above, in the Norwegian groups the highest score for all three elements of the cognitive style was obtained by the working people, while the lowest by the students. The latter ones also obtained the lowest score for predicting the future. The difference in their score and the average value exceeds the value of the standard deviation. In the other groups the differences in the score with reference to the average value in these groups do not exceed the value of the standard deviation. A clear connection between perceiving oneself and predicting the future can be seen here (Figure 3). The groups which obtained the highest score for perceiving oneself also had a high score for predicting the future. No credible connection with perceiving the surrounding world was noticed.

Fig. 3 The connection between various elements of the cognitive style in the Norwegian groups



Comparing the Poles and the Norwegians

With the use of test t, the average scores obtained by the Poles and the Norwegians were compared. The scores for particular styles and totals were higher for the Poles than the Norwegians. The importance of these differences is defined by the levels calculated on the basis of the test of trust level, which is shown in Table 3.

The differences in perceiving oneself in both groups, the differences in score totals, may be considered statistically important. Definitely less important, but still acceptable is the difference in styles of perceiving the surrounding world and predicting the future. It can be noticed that the Poles value the future rather on

the basis of perceiving the surrounding world, while the Norwegians on the basis of the self-perception point of view.

Let us try and sum up the scores obtained in the Polish and Norwegian groups in the range of the cognitive style. So, as for particular components, there are some differences between both countries. In Poland the best scores for self-perception were obtained by computer players. The worst ones were obtained, which seems to be understandable, by the disabled i.e. paraplegics. The high school students, university students and working people have low self-perception, although these groups value the surrounding world more. Although, predicting the future looks more or less the same in all the investigated groups, the worst results were obtained by the paraplegics, and what is interesting, the working people.

Table 3 The average scores obtained for components of the cognitive style and trust levels obtained by the Poles and the Norwegians

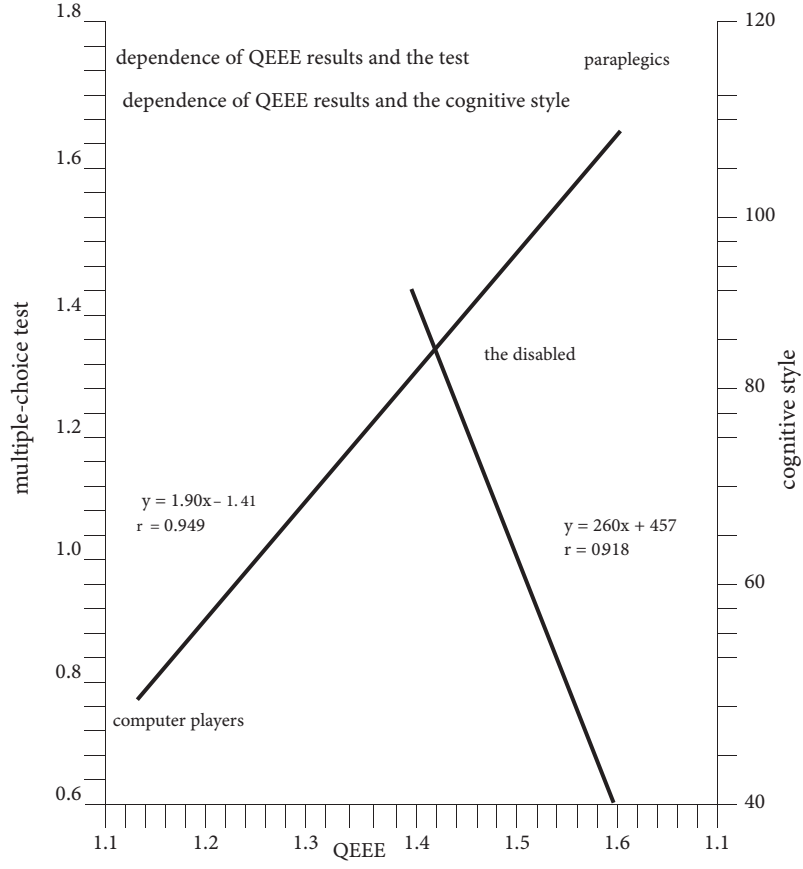
Components of the cognitive style	A
Perceiving oneself	0.006
Perceiving the surrounding world	0.111
Predicting the future	0.132
Total	0.018

The situation is different in Norway. In the researched groups from this country the best scores in the range of the three elements of the cognitive style were obtained by the students. The latter ones have particularly high self-assessment, although high scores were also found among the high school students. Whereas the worst results for the whole cognitive style were obtained by the working people, although when compared with the Polish working people, they perceive the surrounding world and predict their own future much better, and have higher self-assessment. In the Norwegian groups a clear connection between self-assessment and predicting their own future appeared. Whereas in the Polish groups there is a different type of connection. It was determined between perceiving the surrounding world and predicting the future.

It is worth pondering if any connection exists between the cognitive style of the respondents presented here and their emotional resources. Figure 4 shows dependences taking place between the results of various tests checking emotional resources (the multiple-choice test and the Questionnaire of Examining Emotional Experiences QEEE) which were obtained in the Polish and Norwegian groups. Two issues result from the Figure. Firstly, it can be noticed that the scores obtained in the multiple-choice test rise alongside the increase in the number of points obtained in the Questionnaire of Examining Emotional Experiences. The disabled

people, who obtained lower scores than expected diverge greatly from the direction of changes.

Figure 4 The connection between the cognitive style of the examined Poles and Norwegians and their emotional resources in various tests



Secondly, it can be seen in Figure 4 that there is a tendency to a decrease in points for the cognitive style alongside an increase in points in the Questionnaire of Examining Emotional Experiences. The disabled are an exception as they have much higher scores than predicted, and the computer players whose scores are lower than predicted. This situation cannot be explained only by means of the measurement. Therefore, it was decided to do quality research and interviews were made with the respondents from particular groups, whose core was transcendental

reduction allowing to get to the essence of experiencing emotions. This method was used mainly because of the fact that the Questionnaire of Examining Emotional Experiences contained two scales, and in each of them the respondent could receive from 0 to 3 points for each statement, and both for proper marking the answers referring to dysfunctional emotions and those pointing at experiencing creative emotions. Whereas, thanks to the use of transcendental-phenomenological reduction it was possible to get to descriptions of senses and the essence of the components which constitute experiencing emotions from the point of view of "I". Here are some examples:

> **CASE 1:** Poland – a disabled man (paraplegia). He scored 98 points altogether for all the three components of the cognitive style, while the worst score was for "perceiving his own person". The respondent scored 34 points in the multiple-choice test and 44 points in the Questionnaire of Examining Emotional Experiences. Both research tools showed clearly that the respondent experiences dysfunctional emotions, such as: sadness, jealousy, which was proved by the following description of emotional experiences in the situation he was in: "There are no reasons to be happy. What can you be happy about after all? When I can see other boys running, cycling then … I get really angry. Why did this unfortunate jump into the water happen to me? The others made it and still are. And I have such bad luck. And now, when my girlfriend is looking at other boys with such admiration … I feel like hurting her, and then doing something to myself. I think about it now and then, but I don't know how to do it quickly, successfully and without any pain."

The picture of emotional experiences of the computer players looks different, which can be proved by the descriptions of these emotions made by means of the phenomenological reduction:

> **CASE 2:** Poland – a youngster, addicted to playing computer games (3–4 hours a day). He scored 47 points in the Questionnaire of Examining Emotional Experiences, while the best score was for perceiving his own person. The total of points for the multiple-choice test was 30, whereas in the Questionnaire of Emotional Experiences – 52 points. Because of the fact that envy and emotional coldness took very high positions in both tools, he was asked to describe the first emotion: "I'm freaking out when I can see what a posh car my mate drives. What is he better than me at? Maybe at one thing, his old man has got loads of money. I have got an itchy hand to mark their car somehow…" When asked about sensitivity to others, he states spitefully: "What is that

supposed to bring? Let everybody take care of themselves. There is no time for that, I've got to think about myself. I'm not a loser."

CASE 3: Poland – a boy addicted to playing strategic games. The total number of points scored in The Questionnaire of the Cognitive Style was 38, where the best results were referred to both perceiving his own person and predicting the future. He scored 82 points for the multiple-choice test. His score in the Questionnaire of Emotional Experiences was equally high (80 points). Dysfunctional emotions (mainly hatred and anger) and creative emotions such as satisfaction were noticed in both of the tests. Describing hatred he said: "I can't stand anybody being in my way when I want to achieve something. I feel disgust, repulsion and even contempt towards them." "When I'm angry, everything is boiling inside of me. I'm ready to kill, I speak bluntly, they say I humiliate others but I don't remember that. Lots of things make me angry and I often get angry myself, but my family and friends know about it, so they get out of my way." As for the creative emotion, which is satisfaction, it is mainly aroused by a possibility of playing a new game, and also the situation "when everything goes smoothly." He was not able to describe this feelings in detail, limiting himself mainly to statement such as: "It's cool.", "I'm feeling ok."

CASE 4: Poland – a boy playing mainly simulators. He is one of the group of computer players who obtained a high number of points for the cognitive style (89 points). The score obtained in the Questionnaire of Emotional Experiences (76 points) did not match the one the respondent received in the multiple-choice test (48 points). The number is not what matters, but the discrepancy of emotions shown in each test. He described jealousy caught in the test as a dysfunctional emotion in the following way: "I'm suspicious and uneasy when a guy is staring at my girlfriend. If I could, I would kill him." His description was confirmed by the diagnosis of another dysfunctional emotion found in the Questionnaire of Examining Emotional Experiences – greed: "What I lust most in my life is money. You've got the money, you rule the world. Of course, I'm not going to wear my butt working. It's enough to manage to get it and not to throw it about." In both tests the respondent showed a creative emotion i.e. mobilizing fear, and that is how he described experiencing it: "I'm not afraid of anything, unless somebody stronger than me, but still I try to cheat them, keep myself busy with something else to give myself time."

The above descriptions of emotional experiences made by the computer players show that despite the fact that some of them obtained good results for the cognitive

style, their emotions are often diametrically different, and they sometimes literally experience them the other way round.

Let us move on to the effects of the phenomenological reduction used in the other groups.

> **CASE 5:** A high school student from Poland. He received 91 points for the whole Questionnaire of the Cognitive Style, where the best score was for predicting the future, and the worst for perceiving his own person. He obtained 46 points in the multiple-choice test. And not really more in the Questionnaire of Emotional Experiences – 50 points. Anger turned out to be the most domineering dysfunctional emotion in both tests, experiencing of which he expressed in the following way: "When I fly into a rage, I'm like a mad man; I foam at my mouth, throw things around, I vent my anger on others. Later, when I have calmed down, I apologize to everybody and try to make up for it." Whereas noticed in both test a creative emotion – reconciliation – was described by him in the following way: "I don't like being angry with anybody for too long. That's why, even if I don't feel guilty, I make the first step and hold out the olive-branch. I feel relieved then and I want to live".

But the same emotions shown by another respondent from the same group were not experienced identically, which is clearly presented by:

> **CASE 6:** A girl – a high school student from Poland. Her cognitive style was diagnosed at 83 points, where the best scores were obtained for perceiving the surrounding world and the worst for predicting the future. Both the multiple-choice test and the Questionnaire of Emotional Experiences pointed out clearly the respondent's two dysfunctional emotions i.e. anger and sadness. Experiencing the first of them was expressed in the following way: "When I get angry, I mainly get outraged and treat others impolitely". Talking about experiencing sadness, she said: "When I'm sad, I become melancholic, I cry and go to somebody to talk".

A totally different way of experiencing emotions can be noticed in the group of high school students from Norway, which is shown in the description of creative emotions experienced by these students:

> **CASE 7:** A female high school student, who obtained 32 points for the cognitive style. In the multiple-choice test the total number of points was 90 (out of 96 possible), whereas in the Questionnaire of Emotional Experiences the score was 86. And here is how she was describing her emotion of kindness:

> "I am friendly towards all people, even my biggest enemies. It surprises some people, they even criticize me for that. But I feel fine with that. I feel happy when I tell others that I don't want anything bad to happen to them. I smile at them then because people expect a smile and a good word".

One of the creative emotions appearing in the group of the Norwegian high school students was most often admiration for achievements of another person, which is contradictory to envy. The respondents expressed experiencing it in a similar way, which is shown among others by:

> **CASE 8:** A male high school student from Norway – he received 46 points in the Questionnaire of the Cognitive Style. Equally high results were obtained in the multiple-choice test (84 points) and in the Questionnaire of Emotional Experiences (81 points). Admiration for achievements of another person turned out to be the most distinctive creative emotion in both tools, and was expressed during the interview: "I'm surprised by some of my mates when I can see what they are able to do. I share their enjoyment, especially when their achievements are rewarded by adults".

The same emotion was equally often experienced in a bit different way in the group of the Norwegian students, which is shown by:

> **CASE 9:** A male university student from Oslo. She scored 69 points in the Questionnaire of the Cognitive Style. In the multiple-choice test the total number of points was 79, whereas in the Questionnaire of Emotional Experiences the score was 75. Admiration for achievements of another person as a motivating emotion was expressed by her as follows: "When I admire somebody I just go into raptures over this person".

Another creative emotion appearing in the group of the Norwegian students was mobilizing fear, which one of the students described in the following way:

> **CASE 10:** A university student from Norway. He received a poor score in the Questionnaire of the Cognitive Style – 93 points, where the worst was perceiving the surrounding world and predicting the future. Much better results were obtained by him in the multiple-choice test (78 points) and in the Questionnaire of Emotional Experiences (80 points). That is how he describes his emotion of fear: "Although I am shaking inside, I collect all my power for fight or run away".

In the group of the Polish students two different emotions turned out to a very significant emotion, i.e. dysfunctional emotion of envy and a creative emotion

– generosity. Sometimes these two emotions were noticed in the same person at their highest intensity, e.g.:

> **CASE 11:** A female university student from Poland, who received 88 points for the cognitive style, where the worst result was for perceiving her own person. In the multiple-choice test the total number of points was 49, whereas in the Questionnaire of Emotional Experiences the score was 51. Her description of experienced anger looked like that: "When somebody is throwing their money around, I writhe in anger and get really furious". At the same time the student showed, as the above-mentioned tests presented, an emotion of generosity which was described in the interview as follows: "When I have money, I give it away, first of all to those who I love, but also to those who I like. I feel happy then".

However, quite often two other emotions from the group of dysfunctional and creative appeared in the group of the Polish students, which can be illustrated with this example:

> **CASE 12:** A female polytechnic student from Poland. She obtained one of the lowest scores in the Questionnaire of the Cognitive Style in this group i.e. 102 points. Both the multiple-choice test and the Questionnaire of Emotional Experiences showed that she had a dysfunctional emotion – a destructive fear expressed in the following words: "When I am afraid, my legs just sink into the ground, my body shakes, I can't collect my thoughts", and a creative emotion – kindness and sensitivity towards others, which she describes as follows: "I'm very emotional and affectionate towards those who suffer any harm. My heart breaks if I'm not able to help them in any way, I'll at least stroke them or give them a hug".

Creative emotions – kindness and sensitivity towards others could be also found among many working people, although there were more cases of dysfunctional emotions, such as: hatred, envy or greed. Their exemplification can be found in the examples below:

> **CASE 13:** A young computer specialist from Poland. His cognitive style can be regarded as satisfactory since he received 36 points in the Questionnaire of the Cognitive style. The total number of points in the multiple-choice test was not so impressive since it was only 38 points, similarly to the Questionnaire of Emotional Experiences – 43 points. He expressed the experienced emotion of hatred in the following form: "When I can see my boss, my

stomach turns upside down. I have been hiding this terrible hatred inside because I'm afraid he might fire me. I despise him and I hope that he will be …" As for the greed he experienced: "We are living in such times that the importance of a person is measured by the amount of money they possess. It's that I don't earn little, but I am supposed to nibble a little bit of the money, I get sick, or I can't sleep." At the same time this young man shows an emotion of kindness towards people expressed not only in the two tests in use but also in the following description: "Except for my boss, I wish all people would have as successful lives as possible, be healthy and have a lot of money … ha, ha, ha."

CASE 14: A female clerk from Poland. She obtained 49 points in the Questionnaire of the Cognitive Style, where the best result was for perceiving the surrounding world. She obtained 46 points in the multiple-choice test, whereas in the Questionnaire of Emotional Experiences – 51 points. The emotion of kindness and sensitivity, which was revealed in the research, was expressed in the following words: "I'm said to be stupid, and I want to give them my heart. I'm touched by the life of other people, especially sick and poor children. I buy them not only sweets and books, but I can also kiss them heartedly". The same woman, showing the emotions of kindness and sensitivity to others, also experiences emotions of envy: "I get angry when the boss favours my colleague, or when I can see her wearing a new piece of clothing".

Envy was not so often noticed in the Norwegian group when compared to the Polish one. Quite the contrary, they had a totally opposite creative emotion – admiration for achievements of another person. Their descriptions can be found in the following cases:

CASE 15: A female clerk from Norway. She received 39 points for the cognitive style, which include the best result for perceiving the surrounding world. She obtained 53 points in the multiple-choice test, whereas in the Questionnaire of Emotional Experiences – 55 points. In the interview she said: "It makes me proud when the department manager awards one of my workmates. It's to work with somebody who is above the level, who is hard-working and competent … I also get delighted with the style of clothing of some of my friends'. I am happy that they have such good taste". She also expressed the feeling of satisfaction saying: "I feel happy when I enter my office".

These two creative emotions were experienced a bit differently by:

> **CASE 16:** A young university worker from Norway. He received a not too high score in the Questionnaire of the Cognitive Style – 77 points, where the best scores were for predicting the future and perceiving his own person. In the multiple-choice test the total number of points was 63, whereas in the Questionnaire of Emotional Experiences the score was 71. Experiencing an emotion of admiration for the achievements of other people was expressed in these words: "When I can see what other university workers achieve, I feel like living. I congratulate them on that frankly, I am happy with them and decide to get down to hard work not to feel ashamed for doing nothing". Whereas the experienced emotion of satisfaction is expressed by: "I really enjoy working at the university".

Let us sum up all the issues concerning connections between emotional resources of the respondents from both countries and the cognitive system represented by them. On the whole, the respondents who obtained high scores in the tests diagnosing emotional resources (especially in the Questionnaire of Emotional Experiences) most often obtained low scores in M. Blackburn and H. Wilkinson's Questionnaire of Cognitive Style. It means that the higher self-assessment one had, predicted their own future better and perceived their surrounding more precisely, the more creative emotions one had and experienced. Two researched groups diverted from this rule. The first one is the group of computer players who achieving a low score in the multiple-choice test and the Questionnaire of Cognitive Style, also obtained a low number of points in the cognitive style. The other group – paraplegics – inversely; high scores in the tests establishing emotional resources were accompanied by high scores in the cognitive style. Not all the cases proved the rule in all the researched groups. What is more, high scores obtained in the Questionnaire of Emotional Experiences because of two scales used in this tool and an extended range of possible answers for each statement, not always indicated a rich emotional resource of a given individual. Therefore, the transcendental reduction was used, which allowed to reach the essence of experienced emotions. It can be clearly seen that in the group of paraplegics high scores in the multiple-choice test and in the Questionnaire of Emotional Experiences are not always accompanied by high scores in the cognitive style. On the other hand, it is not true that all the computer players achieving low scores in tests establishing emotional resources, also obtained low scores in the Questionnaire of Cognitive Style. Finally, in other groups the one who perceived their own person well, the surrounding world and the future not always showed a lot of creative emotions.

Each of the researched respondents usually showed various results in the range of particular elements of the discussed cognitive triad. Each of them, as shown by the phenomenological reduction, experienced both researched dysfunctional and creative emotions in a different way.

Bibliography

Reykowski, J. (1974). *Eksperymentalna psychologia emocji*. Warszawa.

Obuchowski, K. (1982). *Kody orientacji i struktura procesów emocjonalnych*. Warszawa.

Clore, G.L. (1992). Cognitive phenomenology: Feelings In the construction of judgment. In: L. Martin, A. Tesser (eds.), *The construction of social judgment*. Hillsdale, N.J.: Lawrence Erlbaum.

Frijda, N.H. (1993). *The plan of appraisal In emotion*. Cognition and Emotion.

Lazarus, R. (1993). From psychological stress to the emotions: A history of changing outlooks. *Annual Review of Psychology.*

Scherer, K.R. (1993). Studying the emotion – antecedens appraisal process. An expert system approach. *Cognition and Emotion*, *3(4)*.

LeDoux, J. (2000). *Mózg emocjonalny*. Poznań.

Bornstein, R.F. (2000). Subliminal mere exposure affects In: R.F. Bornstein, T.S. Ditmman (eds.) *Cognitive clinical and social perspectives*. New York.

Bargh, J.A. (1992). Being unconscious of the stimulus vs. Unconscious of its interpretation: Why subliminality per Se does matter to social psychology. In: Bornstein R., Pittman T. (eds.) *Perception without consciousness*. New York.

Davidson. R. (1998). O emocji nastroju i innych pojęciach afektywnych oraz Biologiczne podstawy badań nad stylem afektywnym. In: P. Ekman, R. Davidson (eds), *Natura emocji*. Gdańsk.

Ekman P. (1998) Nastroje, emocje i cechy oraz Wszystkie emocje są podstawowe. In: P. Ekman, R. Davidson (eds), *Natura emocji*. Gdańsk.

Stach R. & Zięba A. (1992) *Człowiek, depresja, terapia*. Kraków.